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Bille Brahe, U.; Egebo, H.; Crepet, P.; Kerkhof, A.J.F.M.

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Article

Social support among European suicide attempters

U. BILLE-BRAHE[1], H. EGEBO[1], P. CREPET[2], D. DE LEO[3], H. HJELMELAND[4], A. KERKHOF[5], J. LÖNNQVIST[6], K. MICHEL[7], E. SALANDER RENBERG[8], A. SCHMIDTKE[9] and D. WASSERMAN[10]
[1]*Centre for Suicidological Research, Odense, Denmark;* [2]*Rome, Italy;* [3]*Servizio Di Psicogeriatria, Università Degli Studi Di Padova, Padova, Italy;* [4]*Department of Psychiatry and Behavioural Medicine, Norwegian University of Science and Technology, Trondheim, Norway;* [5]*Department of Clinical Psychology, Vrije Universiteit Amsterdam, Amsterdam, The Netherlands;* [6]*National Public Health Institute, Department of Mental Health and Alcohol Research, Helsinki, Finland;* [7]*Psychiatrische Poliklinik, Universitätsspital, Bern, Switzerland;* [8]*Department of Psychiatry, Umeå University, Umeå, Sweden;* [9]*Universitäts-Nervenklinik, Würzburg, Germany;* [10]*Centrum för Suicidforskning, och-prevention, Karolinska Institutet, Stockholm, Sweden*

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Abstract. In order to measure social support among suicide attempters, an instrument was especially designed to be included in the follow-up interview study being part of the WHO/Euro Multicentre Study on Parasuicide which is carried out in cooperation with EC Concerted Action on Attempted Suicide. In this paper, which is to be the first in a series, the theories behind the design and the methodology are discussed, and some general results presented. Judged by the level of the need for support, there are some differences between the 10 European areas under study, but judged by the individual's perception of to what degree his needs are met, somewhat to our surprise the majority of the suicide attempters in the various areas under study agree in feeling that their needs for support are met to a great extent.

Key words: social support, suicide attempters

Introduction

Numerous studies have shown that health and wellbeing have something to do with relationships with family, friends, and other "significant others"; in short, with social integration and the existence and the quality of social networks.

The concept of *social integration* was one of the main elements in Durkheim's theories on suicide (Durkheim, 1897), and it has often since been focused on in research on suicide and on suicide attempts as well. Closely related to this concept is the concept of *social support*, which especially since the reviews published in the seventies by Caplan (1974) and Cassel (1976) has been discussed frequently in international literature: "The term 'social

support' has been widely accepted within both medicine and psychiatry to denote those aspects of relationships thought to confer a beneficial effect on physical and psychological health" (Brugha, 1988). Several studies have also showed that social disintegration and lack of social support is a major risk factor for suicidal behaviour (Bille-Brahe, 1985; Bjarnason, 1994; D'Attilio et al., 1992; Eskin, 1995)

The problem is, however, that even though a general agreement seems to exist that there is "... theoretical basis and strong empirical evidence for a causal impact of social relationships on health" (House et al., 1988) there is very little agreement as to definitions, indicators, and how and what to measure – and regarding the mechanisms at work.

The problem has been extensively discussed by, among others, Kaplan et al. (1977), House (1981), Veiel (1985), and Brugha (1991). It seems, however, that so far an important element has been neglected; we have not been able to find any discussions on the importance of interdependency and reciprocity when discussing social support. This is peculiar, as it seems to be commonly accepted that the prerequisite for being and feeling socially integrated is the acknowledgement and the acceptance of *mutual* interdependency. Transferring this to the mechanisms at work when we talk of social support, we also know that the feeling of being needed by others is as important to the well-being of the individual as having his or her own need fulfilled.

A greater part of the studies reported in literature focuses on the individual's access to support, and consequently social support is often measured, as for example in IMSR (Brugha et al., 1987), by how many and what kind of people the individual is surrounded by, how often they meet, what kind of help/support they are offered, etc. Realizing that the way in which people see things may not always reflect what actually takes place, a crucial question is, to what degree the individual himself feels that his need for social support is being met (Champion, 1995; Lakey & Cassady, 1990). Our aim is therefore to develop a model where social support is seen as the outcome of interpersonal action and to study this outcome from the individuals' point of view.

Theoretical considerations

The theory behind our model is partly derived from theories on social integration, partly inspired by considerations put forward in a Norwegian report on social support by Poulsson Kramer (1981).

The relationship between suicidal behaviour and social integration has been discussed elsewhere (Bille-Brahe, 1985, 1987, 1988, 1994) and here it will therefore suffice to say that we see social integration as a function of the interrelationship between the individual and his or her social environ-

ment, and that the concept relates to feelings of belonging, of confidence and security stemming from sharing and obeying common norms and rules, and also of having influence on what is going on in one's society and in one's life. By the same token, we also see social support as a function of the interaction between people. This interaction can be described according to its type of reciprocity, i.e. whether the pattern of interaction can be characterized as *a shared, a balanced* or *a negative* reciprocity.

By *shared reciprocity* we understand a pattern of interaction where the person who is giving support to someone is not expecting anything in return. The individual usually expects, however, that if/when he or she needs support, he or she will receive it. Nobody is keeping any kind of account, but there is a general feeling of confidence and trust in those mutual obligations that ensures that one will be supported when needing it.

Balanced reciprocity is, on the other hand, based on common interests, i.e. it is characterized by persons exchanging *services of equal value* – and that there is *a time element*: you agree to give something for something within a definite period of time. This may be interaction on a highly personal level, or it may be – and most often is – referring to support in a more neutral or non-personal sense.

A negative reciprocity is in actual fact not an interaction, but rather a kind of "one-sided" relationship: a person (or a group) is looking for the best bargain, i.e. to get as much as possible for as little as possible. Often this kind of reciprocity reflects a skewed distribution of power or serious conflicts of interest. Usually, however, it is a question of non-personal or neutral relationships of exchange, such as selling or buying goods, receiving social benefits ("social support"), etc. – or, for that matter, watching TV.

All three types of interactions are normal parts of everyone's daily life, but when we talk about social support as something that may "reduce stress, improve health, and, especially, buffer the impact of stress on health" (House, 1981), we are obviously referring to situations where the pattern of interaction can be described as *shared reciprocity*, i.e. by mutual, personal interdependency.

Another dimension of social support lies in the fact that the interaction can be both instrumental and expressive, i.e. tasks or functions can be divided into practical (instrumental) support and emotional (expressive) support (cf. also House, 1981). In addition to expressing a shared, balanced, or negative reciprocity, the interaction may also concern one or more tasks or functions, i.e. the interaction may be simple or versatile. Versatile interactions typically take place within the network of the family, where emotional needs are taken care of, and practical support is given and taken as well. Simple interactions, i.e. interactions that are based on one function or task only, are generally

instrumental or neutral, and often characterized by negative reciprocity – thus giving no base for personal and binding contacts and mutual obligations.

While accepting that in general social support – defined as an aspect of social integration – in some way is connected with the well-being of the individual and his or her ability to cope, it is an open question whether social support as such can be measured in the same way and by the same instruments all over the world. The functions and the mechanisms of social support are to a great extent determined by traditions and by the social structure of the society, and consequently, the patterns of interaction have to be seen in their cultural context and so do people's expectations and perceptions. In intercultural studies therefore, the most reliable measure of social support is whether there is a balance between what the individual needs and his perception of what is given to him.

The purpose of this study has been to try and look at social support as it is perceived by samples of suicide attempters living in various European areas – areas that differ markedly as to several socio-economic and cultural factors (Bille-Brahe et al., 1993; Bille-Brahe et al., 1996b).

Material and method

The theories and considerations discussed above formed the basis for the design of a construct to be used in the WHO/Euro Multicentre Study on Parasuicide which is carried out in cooperation with EC Concerted Action on Attempted Suicide. The instrument was incorporated in the European Parasuicide Study Interview Schedule (EPSIS I and II) (Kerkhof et al., 1993a, 1993b), and is now being tested in the Repetition-Prediction Study, which is part of the inter-European project in which so far 10 centres, representing 8 European countries participate; i.e. Bern, Emilia Romagna, Helsinki, Leiden, Odense, Padova, Stockholm, Sør-Trøndelag, Umeå, Würzburg (Bille-Brahe et al., 1996b).

The Repetition-Prediction study is a follow-up interview study, the interview following structured interview schedules (EPSIS I and II). The first interview is carried out within one week of the index attempt, the second one year after. The schedule comprises a number of observer-rated and self-reported instruments which, in addition to medical and sociodemographic information and information on motives for the suicide attempt, depression and hopelessness, etc., also cover constructs such as life events, social integration and social support. To ensure interreliability, all interviewers attended a three day training course in using the schedule. So far 1117 initial interviews (EPSIS I) have been carried out, and all data have, after being controlled, been pooled in a Main Library Data Bank.

The construct ‘social support’ has four dimensions, and all four dimensions comprise information on both emotional (expressive) and practical (instrumental) support: needing emotional/practical support; being needed for emotional/practical support; receiving emotional/practical support; and giving emotional/practical support.

The schedule used for registering emotional support asked the following questions: “Do you feel that you need emotional support?”; “Do you feel that you get the support you need?”, “Do you feel that you are needed for emotional support?”, and “Do you feel that you give the support needed from you?”. A similar schedule is completed for practical support. Ratings ranged from “No, not all all”, “To some extent”, and “Yes, very much”. Both schedules include information as to whether family and/or friends are involved. The questionnaire was developed in accordance with the principle investigator at each centre, and understanding the terms and using the formulations were part of the training course.

It has to be kept in mind that age and especially sex, because of the different culturally conditioned sex-role patterns, might be important confounds. However, it has been deemed that including the variables age and sex at this stage will make the material too complicated, and these factors will therefore be discussed elsewhere. Also the predictive value of the instrument will be tested later after the inclusion of data from the follow-up interview (EPSIS II).

Results

As point of departure, an overview of the material under study is given in Table 1. The table shows the number of EPSIS I interviews completed at each centre.

Analyses of the representativeness of the interview populations showed that in general, men were underrepresented both in relation to the total population of patients treated at the hospital, and in relation to the drop-outs, and that the mean age was a little low, but not significantly so. The number of previous attempts were more or less the same, but the interviewed patients stayed longer at hospital.

To evaluate the sturdiness of the material, an explorative principal component analysis was carried out for each centre on the 16 variables in the model:

1. Do you feel that you need practical support – *from* family?
2. Do you feel that you need emotional support – *from* family?
3. Do you feel that you get the practical support you need – *from* family?
4. Do you get the emotional support you need – *from* family?

Table 1. Number of EPSIS I interviews carried out at the centres participating in the multicentre study

Centre	Total no. of attempters treated in hospital	No. asked to participate in the study	No. of completed EPSIS I
Bern	327	119	66
Emilia Romagna	363	273	56
Helsinki	981	615	72
Leiden	296	202	141
Odense	238	193	139
Padova	404	276	106
Stockholm	458	403	202
Sør-Trøndelag	640	114	89
Umeå	456	237	122
Würzburg	220	162	124
In all	4383	2593	1117

5. Do you feel that you are needed for practical support – *by* family?
6. Do you feel that you are needed for emotional support – *by* family?
7. Do you feel that you give the practical support that is needed – *by* family?
8. Do you feel that you give the emotional support that is needed – *by* family?
9. Do you feel that you need practical support – *from* friends?
10. Do you feel that you need emotional support – *from* friends?
11. Do you feel that you get the practical support you need – *from* friends?
12. Do you feel that you get the emotional support you need – *from* friends?
13. Do you feel that you are needed for practical support – *by* friends?
14. Do you feel that you are needed for emotional support – *by* friends?
15. Do you feel that you give the practical support that is needed – *by* friends?
16. Do you feel that you give the emotional support that is needed – *by* friends?

The 1st principal component describes *the general level of social support*, high score indicating a high level of support. Whether the 16 variables contribute equally to the 1st component is evaluated by an isometric test.

The only deviation from the general pattern is seen in the data from Emilia Romagna, and even there the deviance is only caused by the fact that two items contribute very little to the 1st component.

Table 2. First principal component

Centre	N	Loading %	Isometric test (χ^2, df = 15)	Deviations from isometric
Bern	66	85.6	44.22	Test was meaningless as 1st component catches almost all variation
Emilia Romagna	56	26.3	41.91	2, 10 do not contribute
Helsinki	72	30.5	22.21	
Leiden	141	42.1	11.17	
Odense	139	40.9	18.10	
Padova	106	38.8	15.72	
Stockholm	202	36.3	11.64	
Sør-Trøndelag	89	74.3	6.09	
Umeå	122	35.1	9.34	
Würzburg	124	80.2	2.38	

It is, however, probably more interesting to look at how much of the total variation is explained by the component, and here it turns out that the centres are divided into two groups. One is characterized by structured social support (low loadings, meaning that the elements of social support form various patterns) i.e. Helsinki, Odense, Emilia Romagna, Padvoca, Umeå, Leiden, and Stockholm. The other group of centres is characterized by an unstructured system of social support (high loadings) i.e. Würzburg, Sør-Trøndelag, and Bern. Unstructured social support (high loadings on the 1st component) means that all forms of support are of equal importance.

The 2nd principal component describes the importance of *who is giving* the support. Persons who are receiving support from their family have high scores on this component, while people getting their support from friends are scoring low (negative values).

Once again, only the material from Emilia Romagna deviates from the pattern of loadings, namely by item 10 (need for emotional support from friends) going together with the family-items 1–8. In Würzburg and in Bern, the loading on the 2nd principal component is so small that the interpretation is questionable – it can only be supported because it reproduces the results from the other centres.

The third principal component describes the interdependent impact of the 16 variables. Loadings on the 3rd principal component are generally rather small. Albeit, a pattern emerges: persons with a huge need for support (relative to the needs of their surroundings for their support), are scoring relatively high on the 3rd component.

Table 3. Second principal component

Centre	N	Loading	Interpretation
Bern*	66	5.7	+family (1–8) −friends (9–16)
Emilia Romagna	56	19.6	+(1, 2, 3, 4, 5, 8, 10) −(9, 11, 13, 14, 15)
Helsinki	72	20.7	+family (1–8) −friends (9–16)
Leiden	141	13.4	+family (1–8) −friends (9–16)
Odense	139	22.9	+family (1–8) −friends (9–16)
Padova	106	18.4	+family (1–8) −friends (9–16)
Stockholm	202	16.4	+family (1–8) −friends (9–16)
Sør-Trøndelag	89	17.7	+family (1–8) −friends (9–16)
Umeå	122	17.1	+family (1–8) −friends (9–16)
Würzburg*	124	4.0	+family (1–8) −friends (9–16)

* The loading is so small that the interpretation is questionable.

Table 4. Third principal component

Centre	N	Loading	Interpretation
Bern*	66	2.4	+(1, 2, 3, 4, 9, 10, 11, 12)
			−(5, 6, 7, 8, 13, 14, 15, 16)
Emilia Romagna	56	11.4	−(1, 3, 4, 9, 10, 11, 12, 16)
			−(5, 6, 7, 8, 13)
Helsinki	72	9.0	+(1, 2, 3, 4, 6, 9, 10, 11, 12, 14)
			−(5, 7, 8, 13, 15, 16)
Leiden	141	9.3	+(1, 2, 3, 4)
			−(7, 8, 13, 14, 15, 16)
Odense	139	8.4	+(1, 2, 9, 10)
			−(3, 4, 5, 6, 7, 8, 11, 12, 13, 14, 15, 16)
Padova	106	8.8	+(1, 2, 3, 4, 9, 10, 11, 12)
			−(5, 6, 7, 8, 13, 14, 15, 16)
Stockholm	202	10.1	+(1, 2, 3, 4, 9, 10, 11, 12)
			−(5, 6, 7, 8, 13, 14, 15, 16)
Sør-Trøndelag*	89	4.6	+(1, 2, 3, 4, 9, 10, 11, 12)
			−(5, 6, 7, 8, 13, 14, 15, 16)
Umeå	122	11.0	+(1, 2, 3, 4, 9, 10, 11, 12)
			−(5, 6, 7, 8, 13, 14, 15, 16)
Würzburg*	124	3.6	+(1, 2, 4, 6, 10, 14)
			−(7, 8, 9, 11, 13, 15, 16)

*The loading is so small that the interpretation is questionable.

Summing up, the principal component analyses indicate that the material under study has a high degree of consistency. At all centres, the general level of emotional support is the most important; at some places it is even playing the dominating role. In most places, it is also important who is giving the support, i.e. family or friends, and finally the two dimensions 'needing/receiving' and 'being needed/giving', seem to be of some significance.

In the following, results from detailed analyses on the data are presented.[1]

On the average, more than 50 per cent of the European suicide attempters said they had very much need for emotional support from their family, while a little more than one third had the same need for practical support. There were, however, big differences between the various areas under study; the need for emotional support was especially high in Emilia Romagna (70%) and in Odense (76%), while in Sør-Trøndelag fewer had much need for emotional support (35%). The need for practical support varied less, ranging from 45 per cent needing much support in Odense to 22 per cent in Sør-Trøndelag. As to receiving emotional and practical support from the family, there were differences between the centres too, but these were not significant.

On the average, less than one fourth of the suicide attempters did not "get what they asked for" – or they got more – of both emotional and practical support. There are, however, some differences between the areas; for example, in Emilia Romagna, 55 per cent did not feel they got the emotional support they needed, while in Bern, only 18 per cent were in that situation. As to practical support, fewer felt they did not get sufficient support, but again there were some differences between the centres; suicide attempters from Emilia Romagna had the highest proportion of people with unfulfilled needs (35%), while in Bern only 6 per cent felt that their need for practical support was not met. The differences between the centres are, however, not significant at the 5 per cent level.

Figure 1 shows the imbalance between needing and receiving support: how many felt that they were receiving more and how many felt they were receiving less support than they really needed?

On the average, the need for support from friends was – as might be expected – not as high as the need for support from the family, this was especially the case where practical support was concerned. As was the case with support from the family, the need for emotional support was high in Emilia Romagna and in Odense, but an even higher percentage was found in Leiden, where 61 per cent were very much in need for emotional support from friends. The rank order of the centres when need for practical support from friends is concerned, were more or less the same as for practical support from the family.

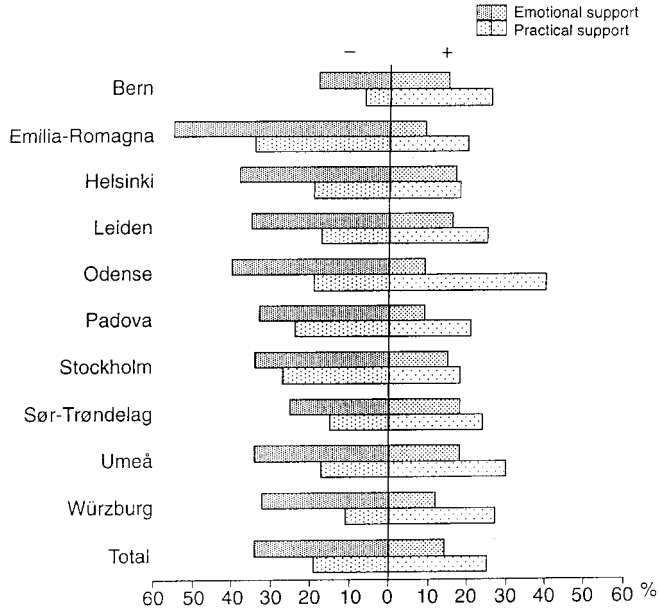

Figure 1. Receiving more or less emotional and practical support from the family than needed.

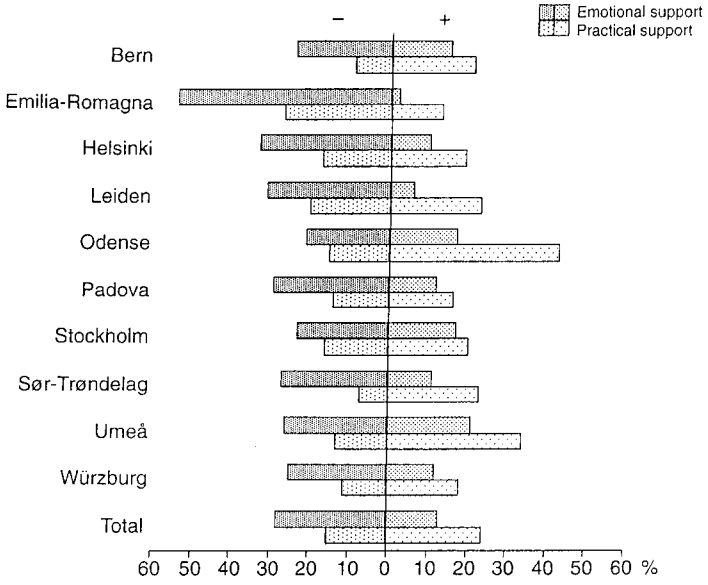

Figure 2. Receiving more or less support from friends than needed.

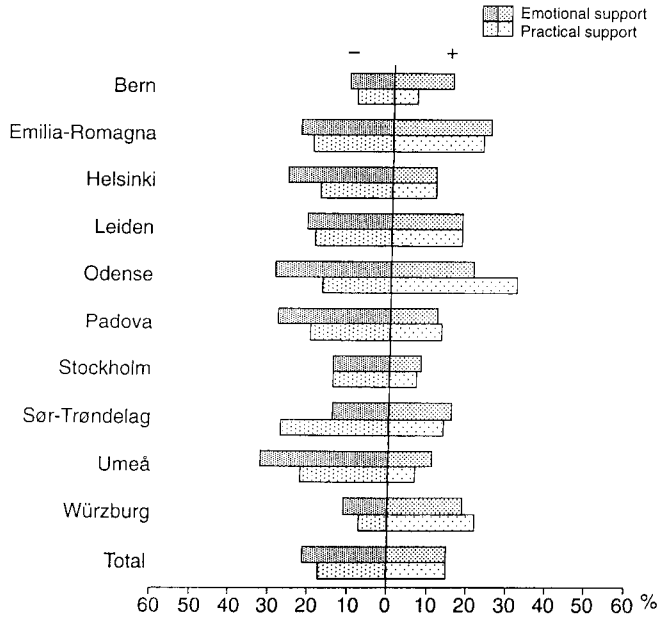

Figure 3. The imbalance between being needed for and giving support within the family.

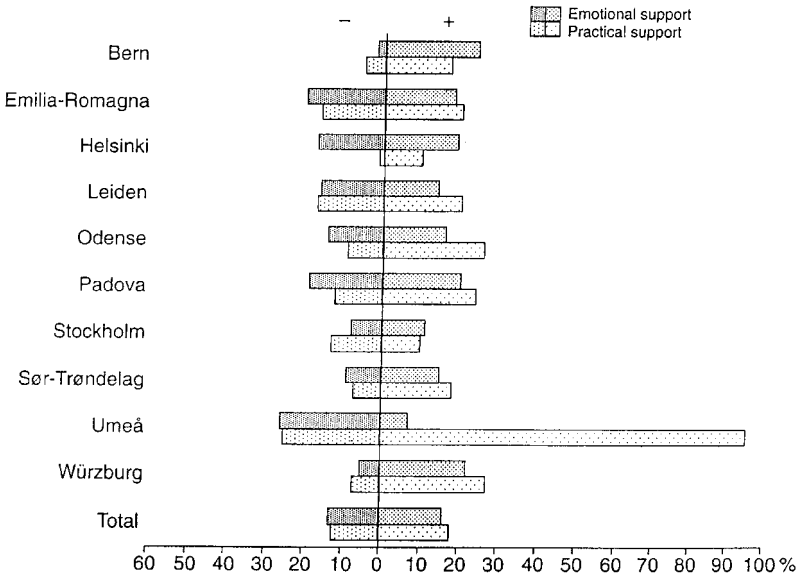

Figure 4. The imbalance between being needed for and giving support to friends.

Table 5a. Emotional support; family by friends (percentage of pooled data, N = 1117)

NEEDING

Family \ Friends	0	1	2
0	13	5	5
1	5	14	6
2	9	13	31

Spearman correlation coefficient 0.38744
Sign. $p < 0.000$

RECEIVING

Family \ Friends	0	1	2
0	18	9	6
1	8	18	6
2	7	10	16

Spearman correlation coefficient 0.31572
Sign. $p < 0.000$

BEING NEEDED

Family \ Friends	0	1	2
0	20	6	5
1	9	17	5
2	8	12	18

Spearman correlation coefficient 0.39880
Sign. $p < 0.000$

GIVING

Family \ Friends	0	1	2
0	20	7	4
1	8	23	7
2	6	8	18

Spearman correlation coefficient 0.45548
Sign. $p < 0.000$

Figure 2 shows the balance between needing and receiving emotional and practical support from friends. Although there are some differences between the centres, they are not statistically significant. About two thirds got the support they felt they needed, and as was the case with support from the family, more than one fifth got more practical support than they really needed.

The other aspect of the concept social support concerns the feeling of being needed for giving support to others, and to what extent one feels one is able to meet these needs. On the average about two thirds of the suicide attempters felt that they were needed by their family, and also more than half felt that they were able to meet that need – this was the case for both emotional and practical support. There were, however, significant differences between the areas under study only as far as support within the family was concerned.

Looking at the balance between being needed for and giving support, there were, however, no significant differences between the areas under study; the majority felt that they were able to meet the needs of their family both as far as emotional and practical support were concerned.

Table 5b. Practical support; family by friends (percentage of pooled data, N = 1117)

NEEDING

Family \ Friends	0	1	2
0	23	7	3
1	11	18	4
2	11	11	12

Spearman correlation coefficient 0.34412
Sign. p<0.000

RECEIVING

Family \ Friends	0	1	2
0	20	7	4
1	9	16	4
2	11	11	19

Spearman correlation coefficient 0.36649
Sign. p<0.000

BEING NEEDED

Family \ Friends	0	1	2
0	24	7	4
1	10	17	3
2	10	13	14

Spearman correlation coefficient 0.39601
Sign. p<0.000

GIVING

Family \ Friends	0	1	2
0	21	6	3
1	10	22	4
2	7	10	17

Spearman correlation coefficient 0.45851
Sign. p<0.000

0 = Not at all **1 = Yes, to some extent** **2 = Yes, very much**

As can be seen from Figure 4, the pattern for being needed for/giving emotional and practical support to friends was more or less the same as for support within the family, and also the balance between the dimensions were rather similar.

To see whether there is some kind of 'trade-off' between family and friends when social support is concerned (cf. the second principal component), correlation coefficients between the two sources of support have been calculated.

From Table 5a and b we see that calculated on pooled data, the correlations between the two sources of support, namely family and friends, were highly significant on all four dimensions of both emotional and practical support. This indicates that in general, no trade-off is taking place – on the contrary; if there, for example, is much need for support from family, there will also be much need for support from friends.

A break-down on the individual centres showed that with very few exceptions this was the case in all the areas under study; high values on any of the dimensions of support involving the family correlated with high values on the dimension of support involving friends. Exceptions were the areas of Sør-Trøndelag and Würzburg, where the correlations concerning the reception of emotional support were not significant ($p > 0.150$ and $p > 0.668$, respectively), indicating a *slight* trade-off effect. The areas of Sør-Trøndelag and Bern were also exceptions as far as practical support was concerned. In Sør-Trøndelag, the feeling of being needed for practical support by the family did not correlate significantly with being needed by friends ($p > 0.300$); in Bern, needing and receiving practical support from the family did not correlate with practical support from friends ($p > 0.155$, $p > 0.132$, respectively). In these cases, it seems that support from the family to some extent makes support from friends superfluous.

Finally, Figure 5 gives an overview of the suicide attempters in the various areas under study placed on the four dimensions of emotional and practical support in relation to family and to friends.

From Figure 5 is seen that all centres tend to cluster along the diagonals, i.e. in general, there is a balance between the dimensions, especially when social support within the family is concerned. This goes not only for the balance between needing and receiving support, but also when it comes to needing and *feeling needed*, and also regarding receiving and giving support. The Danish centre places itself rather far out on the diagonals, in particular when support within the family is concerned, while Bern, on the other hand, places itself out on very high values when emotional support from friends is concerned. In general, however, there are many similarities between the various areas under study.

Discussion

Social support has been recognized as an important factor that affects both physical and mental health. Consequently, the question of adequate social support is highly relevant when trying to intervene with or prevent suicidal behaviour. In our study we have argued that the most reliable measurement, when studying social support, is how the individual views his or her situation and that it is necessary to include reciprocity as an important element.

Knowing from numerous studies that loneliness and interpersonal problems are some of the characteristics of suicide attempters, we expected to find a general insufficiency of social support on all four dimensions. Furthermore, considering the great variety in cultural and traditional conditions throughout

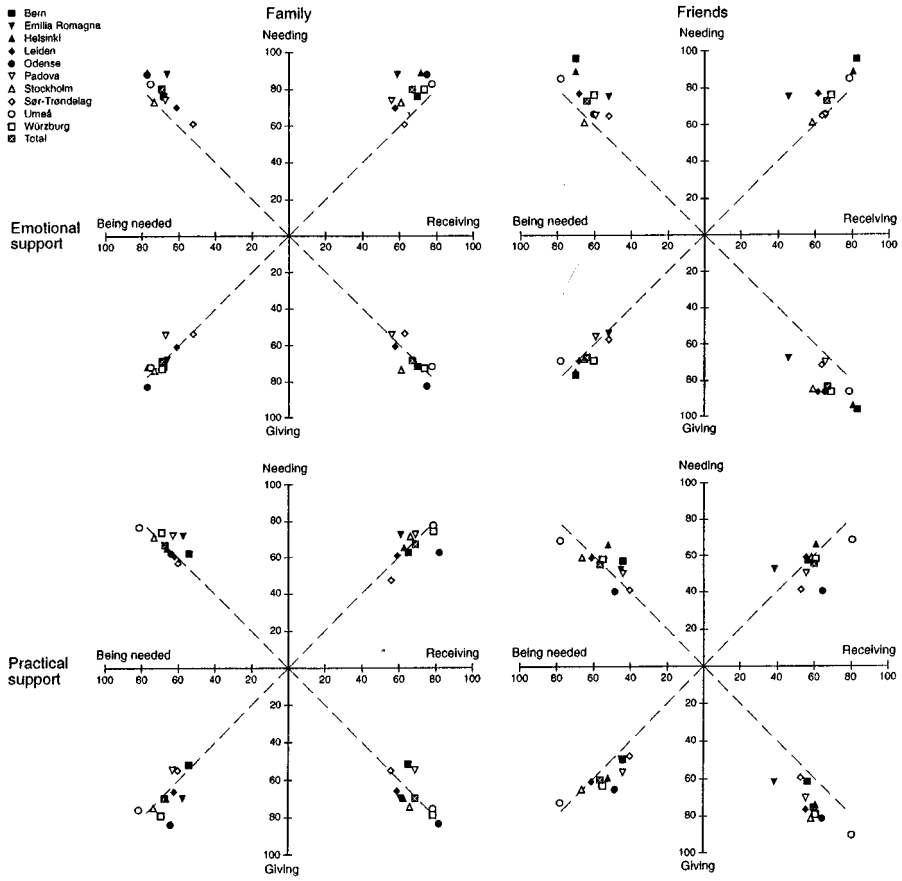

Figure 5. Suicide attempters by their position on the four dimensions of social support in the family and among friends by areas under study

Europe, we expected marked differences in the level of support between the areas under study.

Unfortunately, we have had no way of comparing the level of support in our samples of suicide attempters with ‘standards’ in the normal populations. Our results show, however, that apparently most attempters feel that their need for support is being met, and that they also felt that they themselves were needed and able to give what was needed from them.

Looking at the four dimensions separately, there were significant differences between the areas as to the level of support on some of the dimensions, but when looking at the *balance* between the dimensions, the differences were surprisingly few. In conclusion it can be said, that judged by the level of the need for support, there are differences between the areas under study, but

judged by the individual perception of to what degree his needs are met, the majority of suicide attempters in the various European areas agree in feeling that their needs are met to a great extent. The conclusion needs, however, to be qualified by further studies; one has, for example, to keep in mind that many suicidal patients may have been suffering during childhood or later from neglect and abuse and therefore have very low expectations as to receiving support from other people; consequently their needs may be easily satisfied. Also the immediate emotional relief sometimes following the self destructive act may cause the attempter to express during the interview an (unrealistically) positive outlook.

The topic of social support is complicated, and more analyses are needed, among others also of distributions on age and especially sex, variables that undoubtedly are important confounders in this connection.

Note

1. Detailed tables are available from the author.

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Address for correspondence: Unni Bille-Brahe, Centre for Suicidological Research, Tietgens Allé 108, DK 5230 Odense M, Denmark
Phone: +45 66 13 88 11; Fax: +45 65 90 81 74; E-mail: ubb@dou.dk